#2

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/918,359

DATE: 08/07/2001 TIME: 13:29:41

Input Set : A:\LEX-0208-USA SEQLIST.txt
Output Set: N:\CRF3\08072001\1918359.raw

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     4 <110> APPLICANT: Walke, D. Wade
             Mathur, Brian
             Turner, C. Alexander Jr.
     6
             Friddle, Carl Johan
     7
    10 <120> TITLE OF INVENTION: Novel Human Ion Channel Proteins and Polynucleotides
Encoding the
             Same
    11
    13 <130> FILE REFERENCE: LEX-0208-USA
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C--> 15 <141> CURRENT FILING DATE: 2001-07-30
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    16 <151> PRIOR FILING DATE: 2000-07-28
     18 <150> PRIOR APPLICATION NUMBER: US 60/222,503
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     36 gtgaacgtgg gtggccacag ctaccagctg gactactgcg agctggccgg cttccccaag
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PATENT APPLICATION: US/09/918,359

DATE: 08/07/2001
TIME: 13:29:41

Input Set : A:\LEX-0208-USA SEQLIST.txt
Output Set: N:\CRF3\08072001\1918359.raw

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67 1 5 68 Asn Thr Thr Glu Asn Glu Gly Ser Gln His Arg Arg Ser Ile Cys Ser 30	
69 20 25 The Use Cly Trp Thr Glu	
69 20 25 70 Leu Gly Ala Arg Ser Gly Ser Gln Ala Ser Ile His Gly Trp Thr Glu	
71 35 40 Ave Clu Asp Cly Gly Gly Gly Gly	
71 35 40 72 Gly Asn Tyr Asn Tyr Tyr Ile Glu Glu Asp Glu Asp Gly Glu Glu Glu Glu 60	
73 50 55 55 Clu App Cln Gln Ala Glv Glu	
73 50 55 74 Asp Gln Trp Lys Asp Asp Leu Ala Glu Glu Asp Gln Gln Ala Gly Glu 75 80	
75 65 70 70 Pro Pro Pro Ala Leu Leu	
75 65 70 70 70 70 70 70 70 70 70 70 70 70 70	
77 85 Ser Tyr Gln Leu Asp Tyr	
77 85 78 Ser Thr Leu Asn Val Asn Val Gly Gly His Ser Tyr Gln Leu Asp Tyr 105 110	
79 100 The The Arg Leu Gly Arg Leu Ala Thr	
79 100 103 80 Cys Glu Leu Ala Gly Phe Pro Lys Thr Arg Leu Gly Arg Leu Ala Thr	
81 115 Ser Leu Cys Asp Asp Tyr Glu Glu	
81 115 120 82 Ser Thr Ser Arg Ser Arg Gln Leu Ser Leu Cys Asp Asp Tyr Glu Glu	
83 130 135 140 84 Gln Thr Asp Glu Tyr Phe Phe Asp Arg Asp Pro Ala Val Phe Gln Leu	
84 Gln Thr Asp Glu Tyr Phe Phe Asp Arg 755 160	
85 145 150 150 153 86 Val Tyr Asn Phe Tyr Leu Ser Gly Val Leu Leu Val Leu Asp Gly Leu	
86 Val Tyr Asn Phe Tyr Leu Ser Gry Var 200 175	
87 165 170 88 Cys Pro Arg Arg Phe Leu Glu Glu Leu Gly Tyr Trp Gly Val Arg Leu	
88 Cys Pro Arg Arg Pile Led Gld Sld 200 190	
89 180 180 Cys Arg Ile Cys Phe Glu Glu Arg Arg Asp 90 Lys Tyr Thr Pro Arg Cys Cys Arg Ile Cys Phe Glu Glu Arg Arg Asp 200 205	
90 Lys Tyr Thr Plo Alg Cys Gys 200	
91 195 200 92 Glu Leu Ser Glu Arg Leu Lys Ile Gln His Glu Leu Arg Ala Gln Ála 215 220	
92 GIU Leu Ser GIU Ary 100 215 220	
93 210 215 94 Gln Val Glu Glu Ala Glu Glu Leu Phe Arg Asp Met Arg Phe Tyr Gly 240 235 240	
94 Gin vai Giu Giu Aiu 320 235 240 235 235 240	
95 225 230 250 96 Pro Gln Arg Arg Leu Trp Asn Leu Met Glu Lys Pro Phe Ser Ser 250 255	
96 Pro Gin Arg Arg 129 250 250 250	
97 245 250 98 Val Ala Ala Lys Ala Ile Gly Val Ala Ser Ser Thr Phe Val Leu Val 265 270	
98 Val Ala Ala Lys Ala La 270 265 265 267 268 270	
99 260 203 100 Ser Val Val Ala Leu Ala Leu Asn Thr Val Glu Glu Met Gln Gln His	
100 Ser val val Ald 250 3280 285	
101 275 280 102 Ser Gly Gln Gly Glu Gly Gly Pro Asp Leu Arg Pro Ile Leu Glu His 205 300	
102 Ser Gly Gin Gly Tyr Jeu Leu Arg	
104 Wel Cly Met Leu Cys Met Gly Phe Phe Thr Leu Glu Tyl 200	
104 Val Giu Met Bed 5/1 310 315 320 310 315 Arg Ser Ala Leu Asn	
106 Lou Ala Ser Thr Pro Asp Leu Arg Arg The Title 1235.	
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RAW SEQUENCE LISTING
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DATE: 08/07/2001
TIME: 13:29:41

Input Set : A:\LEX-0208-USA SEQLIST.txt
Output Set: N:\CRF3\08072001\I918359.raw

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109 340 110 Glu Cys Phe Thr Gly Glu Gly His Gln Arg Gly Gln Thr Val Gly Ser	
111 355 112 Val Gly Lys Val Gly Gln Val Leu Arg Val Met Arg Leu Met Arg Ile	
113 370 114 Phe Arg Ile Leu Lys Leu Ala Arg His Ser Thr Gly Leu Arg Ala Phe 400	
115 385 116 Gly Pho Thr Ley Arg Gln Cys Tyr Gln Gln Val Gly Cys Leu Leu	
117 The Ala Met Gly Ile Phe Thr Phe Ser Ala Ala Val Tyr Ser Val	
110 File 112 420 119 420 120 Glu His Asp Val Pro Ser Thr Asn Phe Thr Thr Ile Pro His Ser Trp 440 445	
120 Glu HIS 185 440 440 121 435 122 Trp Trp Ala Ala Val Ser Ile Ser Thr Val Gly Tyr Gly Asp Met Tyr 460 460	
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DATE: 08/07/2001 RAW SEQUENCE LISTING TIME: 13:29:41 PATENT APPLICATION: US/09/918,359

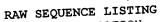
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212 <213> ORGANISM: Homo sapiens

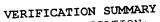
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DATE: 08/07/2001 TIME: 13:29:41 PATENT APPLICATION: US/09/918,359

Input Set : A:\LEX-0208-USA SEQLIST.txt Output Set: N:\CRF3\08072001\I918359.raw

Output Set: N:\CRF3\00072007	_
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251 Trp Gly Gly Asp Flo Var 40 252 35 40 253 Gln Asp Asp Gly Gln Asp Arg Glu Arg Leu Thr Tyr Phe Gln Asn Leu 253 Gln Asp Asp Gly Gln Asp Asp Glu Arg Leu Thr Tyr Phe Gln Asn Leu	
253 Gln Asp Asp Gly Gln Asp Alg Gla 459 254 50 255 Pro Glu Ser Leu Thr Ser Leu Leu Val Leu Leu Thr Thr Ala Asn Asn 70 70 70 70 70 70 70 70 70 7	
255 Pro Glu Ser Leu Thr Ser Leu Bed Var 256 65 75 75 80 256 65 70 75 Asn Arg Ala Tyr Ala Ile	
256 65 257 Pro Asp Val Met Ile Pro Ala Tyr Ser Lys Asn Arg Ala Tyr Ala Ile 257 Pro Asp Val Met Ile Pro Ala Tyr Ser Lys Asn Arg Ala Tyr Ala Ile 90 85	
258 85 90 90 258 259 Phe Phe Ile Val Phe Thr Val Ile Gly Ser Leu Phe Leu Met Asn Leu 110 105 110 110 105 110 Met Lys Ser	
260 100 105 105 261 Leu Thr Ala Ile Ile Tyr Ser Gln Phe Arg Gly Tyr Leu Met Lys Ser 120 125	
262 In Gin Thr Ser Leu Phe Arg Arg Leu Gly Thr Arg Ala Ala The	
264 130 135 264 Glu Val Leu Ser Ser Met Val Gly Gly Gly Ala Phe Pro Gln Ala	
200 Gin var 200 c	



PATENT APPLICATION: US/09/918,359

DATE: 08/07/2001 TIME: 13:29:42

Input Set : A:\LEX-0208-USA SEQLIST.txt Output Set: N:\CRF3\08072001\1918359.raw

L:15 M:270 C: Current Application Number differs, Replaced Current Application No

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date